

K070071



JAN 25 2007

## **510(k) Summary**

**Submitter:** OmniGuide, Inc.  
One Kendall Square, Building 100 3<sup>rd</sup> Floor  
Cambridge, MA 02139

**Contact Person:** Douglas W. Woodruff  
**Telephone:** 617-551-8404

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**Proprietary Name:** OmniGuide Zero Flow ZF-T Waveguide Fiber

**Common Name:** CO<sub>2</sub> Laser Powered Surgical Instrument

**Classification:** 878.4810

**Product Code:** GEX

**Classification Name:** Laser surgical instrument for use in general and plastic surgery and in dermatology.

### **Substantial Equivalence Claimed To:**

K063141, OmniGuide ZeroFlow ZF-T 150 WaveGuide Fiber

K992472, SureGuide CO2 Laser Beam Delivery System

**Description:**

The OmniGuide Zero Flow ZF-T WaveGuide fiber is an accessory for CO<sub>2</sub> laser systems. It consists of a fiber assembly that propagates CO<sub>2</sub> laser beams and vents the cooling gases outside of the body. The OmniGuide ZF-T wave guide fiber is supplied sterile and is intended for single procedure use.

**Intended Use:**

The OmniGuide Zero Flow ZF-T WaveGuide Fiber is indicated for the incision, excision, ablation, vaporization and coagulation of body soft tissues including intra-oral tissues. It is indicated in the medical specialties of general and plastic surgery, oral/maxillofacial surgery, dentistry, dermatology, gynecology, otorhinolaryngology, gastroenterology, neurosurgery, urology, and pulmonology, and can be used in open surgical procedures as well as endoscopic minimally invasive procedures in conjunction with rigid or flexible endoscopes, such as in laryngoscopy, gastroscopy, colonoscopy, laparoscopy, thoracoscopy, hysteroscopy and bronchoscopy.

The indications for use for which the delivery system is used for are dependent upon the cleared indications for use of the laser system and those laser system accessories to which it is attached.

**Summary of Technological Characteristics:**

The device consists of an optical fiber assembly. The main functional component of the fiber assembly is a photonic bandgap reflector lining its hollow core that reflects and thereby guides CO<sub>2</sub> laser energy. The fiber incorporates a lens at the tip which is transparent to the laser beam. The fiber also incorporates a sensor on the fiber tip that allows physicians to determine when the lens becomes obstructed by debris. The fiber assembly is 1 to 2 m long and transmits at the CO<sub>2</sub> laser emission wavelength of 10.6 μm.

**Performance Data:**

Non-clinical Performance Data: The OmniGuide Zero Flow ZF-T WaveGuide Fiber performance characteristics have been evaluated through testing and analysis of laser power output and beam quality. This type of testing complies with the respective section of the FDA Guidance on the Content and Organization of a Premarket Notification for a Medical Laser (1995) and is similar to the predicate device tests. The performance of OmniGuide Zero Flow ZF-T WaveGuide Fiber and related parameters of predicate devices are comparable.

Clinical Performance Data: Formal clinical trials were not deemed necessary as the device is using the similar technology and intended use as predicate devices.

**Conclusions Drawn from Tests and Analysis:**

The intended use and major performance parameters (energy transmission levels and beam quality) of the OmniGuide Zero Flow ZF-T WaveGuide Fiber are similar or equivalent to same characteristics of above mentioned legally marketed devices. The evaluation and testing completed by OmniGuide did not raise any new issues of safety and effectiveness.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

OmniGuide, Inc.  
% Regulatory Technology Services, LLC  
Mr. Mark Job  
1394 25<sup>th</sup> Street, Northwest  
Buffalo, Minnesota 55313

JAN 25 2007

Re: K070071

Trade/Device Name: OmniGuide Zero Flow ZF-T WaveGuide Fiber

Regulation Number: 21 CFR 878.4810

Regulation Name: Laser surgical instrument for use in general and plastic surgery and in dermatology

Regulatory Class: II

Product Code: GEX

Dated: January 4, 2007

Received: January 8, 2007

Dear Mr. Job:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set

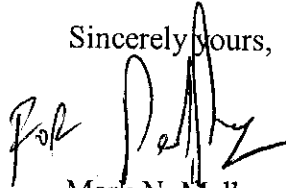
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forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Mark N. Melkerson', is written over a horizontal line.

Mark N. Melkerson  
Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known): Not yet assigned

Device Name: OmniGuide Zero Flow ZF-T WaveGuide Fiber

### Indications for Use:

The OmniGuide Zero Flow ZF-T WaveGuide Fiber is indicated for the incision, excision, ablation, vaporization and coagulation of body soft tissues including intra-oral tissues. It is indicated in the medical specialties of general and plastic surgery, oral/maxillofacial surgery, dentistry, dermatology, gynecology, otorhinolaryngology, gastroenterology, neurosurgery, urology, and pulmonology, and can be used in open surgical procedures as well as endoscopic minimally invasive procedures in conjunction with rigid or flexible endoscopes, such as in laryngoscopy, gastroscopy, colonoscopy, laparoscopy, thoracoscopy, hysteroscopy and bronchoscopy.

The indications for use for which the delivery system is used for are dependent upon the cleared indications for use of the laser system and those laser system accessories to which it is attached.

Prescription Use   X    
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

  
Concurrence of CDRH, Office of Device Evaluation (ODE)

**(Division Sign-Off)**  
**Division of General, Restorative,**  
**and Neurological Devices**

510(k) Number

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